(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 23 October 2003 (23.10.2003)

PCT

(10) International Publication Number WO 03/087304 A2

(51) International Patent Classification7:

C₁₂N

- (21) International Application Number: PCT/US03/10440
- (22) International Filing Date: 4 April 2003 (04.04.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/369,793

4 April 2002 (04.04.2002) US

- (71) Applicant (for all designated States except US): BIO-GEN, INC. [US/US]; 14 Cambridge Center, Cambridge, MA 02142 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LEE, Wen-Cherng [US/US]; 192 Spring Street, Lexington, MA 02421 (US). SUN, Lihong [US/US]; 15 Mystic Terrace, Arlington, MA 02474 (US). SHAN, Feng [CN/US]; 11 Baron Park Lane #26, Burlington, MA 01803 (US). CHUAQUI, Claudio [CA/US]; 30 Chandler Street, Apt. #1, Somerville, MA 02144 (US). ZHENG, Zhongli [US/US]; 640 Marrett Road, Lexington, MA 02421 (US). PETTER, Russell, C. [US/US]; 343 Hudson Road, Stow, MA 01775 (US).

- (74) Agent: LINKKILA, Timothy, P.; Biogen, Inc., 14 Cambridge Center, Cambridge, MA 02142 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

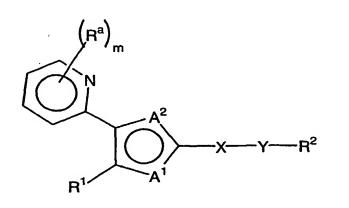
(I)

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TRI-SUBSTITUTED HETEROARYLS AND METHODS OF MAKING AND USING THE SAME





(57) Abstract: Compounds of formula (I) possess unexpectedly high affinity for Alk 5 and/or Alk 4, and can be useful as antagonists thereof for preventing and/or treating numerous diseases, including fibrotic disorders. In one embodiment, the invention features a compound of the general formula (I).